R-ARD- 13-10A



### STATE OF NEW HAMPSHIRE

### 2013

### **Annual Motor Vehicle Inspection Program Report**

## Appendix A Anti-tampering and OBD II Inspection Data

July 31, 2014

# Prepared by New Hampshire Department of Environmental Services New Hampshire Department of Safety, Division of Motor Vehicles with the assistance of Gordon-Darby, Inc.





### TABLE OF CONTENTS

Appendix A	1
4.1.1 - 51.366(a) Test Data Report	
(a)(1) The number of vehicles tested by model year and vehicle type	3
(a)(2) By model year and vehicle type, the number and percentage of vehicles:	3
(i) Failing initially, per test type	3
(ii) Failing the first retest per test type	3
(iii) Passing the first retest per test type	3
(iv) Initially failed vehicles passing the second or subsequent retest per test type	4
(v) The number and percentage of vehicles receiving a waiver that initially failed	3
(vi) Vehicles with no known final outcome (regardless of reason)	7
(xi) Passing the on-board diagnostic check	7
(xii) Failing the on-board diagnostic check	7
(xi) Passing the on-board diagnostic check	
(xii) Failing the on-board diagnostic check	8
(xix) MIL is commanded on and no codes are stored	
(xx) MIL is not commanded on and codes are stored	8
(xxi) MIL Is commanded on and codes are stored.	
(xxii) MIL is not commanded on and codes are not stored	8
(xxiii) Readiness status indicates that the evaluation is not complete for any module s board diagnostic systems.	
(a)(3) The initial test volume by model year and test station	9
(a)(4) The initial test failure rate by model year and test station	

#### 4.1.1 - 51.366(a) Test Data Report

The program shall submit to EPA by July of each year a report providing basic statistics on the testing program for January through December of the previous year, including:

(a)(1) The number of vehicles tested by model year and vehicle type.

Calendar Year 2013 – Number and Type of Vehicles Tested									
Model Year	Vehicle Type	OBD	Visual	Grand Total					
2015	L	29	0	29					
2014	L	19,365	0	19,365					
2013	L	97,359	7	97,366					
2012	L	88,931	3	88,934					
2011	L	83,072	2	83,074					
2010	L	79,231	2	79,233					
2009	L	61,616	0	61,616					
2008	L	81,735	3	81,738					
2007	L	80,615	0	80,615					
2006	L	77,284	1	77,285					
2005	L	80,740	2	80,742					
2004	L	76,420	4	76,424					
2003	L	68,873	3	68,876					
2002	L	61,428	5	61,433					
2001	L	51,291	1	51,292					
2000	L	46,199	0	46,199					
1999	L	35,406	4	35,410					
1998	L	28,590	1	28,591					
1997	L	21,598	2	21,600					
1996	L	14,170	1	14,171					
1995	L	0	11,761	11,761					
1994	L	0	7,889	7,889					
Grand Total		1,153,952	19,691	1,173,643					

(a)(2) By model year and vehicle type, the number and percentage of vehicles:

- (i) Failing initially, per test type;
- (ii) Failing the first retest per test type;
- (iii) Passing the first retest per test type;

- (iv) Initially failed vehicles passing the second or subsequent retest per test type;
- (v) The number and percentage of vehicles receiving a waiver that initially failed The NH I/M Program does not allow for waivers.

		Calendar Year 2013– OB	D Emissio	ns Test	Results	
Year	Туре	Test Sequence	Pass	Fail	Total	% Fail
2015	L	Initial Test	29	0	29	0.00%
	L	First Re-test	0	0	0	0.00%
	L	Subsequent Re-test	0	0	0	0.00%
2014	L	Initial Test	19,275	90	19,365	0.46%
	L	First Re-test	81	1	82	1.22%
	L	Subsequent Re-test	1	0	1	0.00%
2013	L	Initial Test	96,978	381	97,359	0.39%
	L	First Re-test	362	3	365	0.82%
	L	Subsequent Re-test	2	0	2	0.00%
2012	L	Initial Test	88,524	407	88,931	0.46%
	L	First Re-test	450	13	463	2.89%
	L	Subsequent Re-test	13	1	14	7.14%
0044	L	Leitial Tast	04.042	2020	02.072	2.440/
2011	<u> </u>	Initial Test	81,043	2029	83,072	2.44%
	L	First Re-test	1,539	400	1,939	20.63%
	L	Subsequent Re-test	347	223	570	39.12%
2010	L	Initial Test	76,843	2,388	79,231	3.01%
	L	First Re-test	1,869	471	2,340	20.13%
	L	Subsequent Re-test	425	212	637	33.28%
2009	L	Initial Test	59,331	2,285	61,616	3.71%
	L	First Re-test	1,842	411	2,253	18.24%
	L	Subsequent Re-test	376	183	559	32.74%
2008	L ·	Initial Test	78,183	3,552	81,735	4.36%
	<u>L</u>	First Re-test	2,883	627	3,510	17.86%
	L	Subsequent Re-test	568	247	815	30.31%
2007	L	Initial Test	76,122	4,493	80,615	5.57%
	L	First Re-test	3,563	775	4,338	17.87%
	L	Subsequent Re-test	680	364	1,044	34.87%
		2 3300 40000		-		
2006	L	Initial Test	71,445	5,839	77,284	7.56%
	L	First Re-test	4,488	1,077	5,565	19.35%
	L	Subsequent Re-test	946	442	1,388	31.84%
2005	L	Initial Test	73,398	7,342	80,740	9.09%

L	First Re-test	5,527	1,423	6,950	20.47%
L	Subsequent Re-test	1,241	614	1,855	33.10%

	Cal	endar Year 2013– OBI	) Emissions	Test Resi	ults (cont.)	
Year	Туре	Test Sequence	Pass	Fail	Total	% Fail
2004	L	Initial Test	67,776	8,644	76,420	11.31%
	L	First Re-test	6,280	1,767	8,047	21.96%
	L	Subsequent Re-test	1,456	837	2,293	36.50%
2003	L	Initial Test	59,388	9,486	68,874	13.77%
	L	First Re-test	6,766	1,993	8,759	22.75%
	L	Subsequent Re-test	1,670	978	2,648	36.93%
2002	L	Initial Test	51,343	10,085	61,428	16.42%
	L	First Re-test	6,758	2,350	9,108	25.80%
	L	Subsequent Re-test	1,927	1,318	3,245	40.62%
2001	L	Initial Test	40,924	10,365	51,289	20.21%
	L	First Re-test	6,473	2,726	9,199	29.63%
	L	Subsequent Re-test	2,132	1,684	3,816	44.13%
2000	L	Initial Test	38,232	7,967	46,199	17.24%
	L	First Re-test	5,521	1,491	7,012	21.26%
	L	Subsequent Re-test	1,141	632	1,773	35.65%
1999	L	Initial Test	29,018	6,387	35,405	18.04%
	L	First Re-test	4,305	1,259	5,564	22.63%
	L	Subsequent Re-test	983	512	1,495	34.25%
1998	L	Initial Test	23,282	5,308	28,590	18.57%
	L	First Re-test	3,397	1,001	4,398	22.76%
	L	Subsequent Re-test	745	496	1,241	39.97%
1997	L	Initial Test	17,728	3,871	21,599	17.92%
	L	First Re-test	2,467	790	3,257	24.26%
	L	Subsequent Re-test	565	418	983	42.52%
1996	L	Initial Test	11,491	2,679	14,170	18.91%
	L	First Re-test	1,645	533	2,178	24.47%
	L	Subsequent Re-test	356	249	605	41.16%
		Initial Tests Totals	1,060,355	93,597	1,153,952	8.11%
		Overall Test Totals	1,142,145	122,118	1,264,264	9.66%

<u>NOTE</u> : Due to the timing of OBD tests/re-tests, there is no direct relationship between Initial Test failures and Re-test counts (i.e.	. Initial
Tests and Re-tests may have occurred for a particular vehicle during different calendar years).	

(a)(2) By model year and vehicle type, the number and percentage of vehicles: (vi) Vehicles with no known final outcome (regardless of reason).

Calendar Year 2013 - No Final Outcome Vehicles									
Model Year	Туре	NFO Total	Total Tested	Total %					
2015	L	0	29	0.00%					
2014	L	6	19,365	0.03%					
2013	L	23	97,359	0.02%					
2012	L	22	88,931	0.02%					
2011	L	179	83,072	0.22%					
2010	L	256	79,231	0.32%					
2009	L	265	61,616	0.43%					
2008	L	398	81,735	0.49%					
2007	L	601	80,615	0.75%					
2006	L	805	77,284	1.04%					
2005	L	1,034	80,740	1.28%					
2004	L	1,347	76,420	1.76%					
2003	L	1,550	68,874	2.25%					
2002	L	2,004	61,428	3.26%					
2001	L	2,271	51,291	4.43%					
2000	L	1,818	46,199	3.94%					
1999	L	1,583	35,406	4.47%					
1998	L	1,460	28,590	5.11%					
1997	L	1,152	21,598	5.33%					
1996	L	847	14,170	5.98%					
Totals		17,621	1,153,952	1.53%					

<u>NOTE</u>: NFO totals above include: 1) Vehicles that were initially tested, but not re-tested; and 2) Vehicles failing Initial Tests & all Retests. This date reflects any re-tests within 5-months of initial failure even if the re-test occurred in the subsequent calendar year.

- (a)(2) By model year and vehicle type, the number and percentage of vehicles:
  - (xi) Passing the on-board diagnostic check;
  - (xii) Failing the on-board diagnostic check;
  - (xix) MIL is commanded on and no codes are stored;
  - (xx) MIL is not commanded on and codes are stored;
  - (xxi) MIL Is commanded on and codes are stored;
  - (xxii) MIL is not commanded on and codes are not stored;
  - (xxiii) Readiness status indicates that the evaluation is not complete for any module supported by on-board diagnostic systems;

	2013 OBD Test Results – Light Duty Vehicles - All Test Sequences (Initial Tests & Retests)															
	OBD Test Results					MIL Commanded On			MIL Not Commanded On			On	Vehicles Not Ready			
Year	Fail	Fail %	Pass	Pass %	No DTCs stored	%	DTCs store d	%	No DTCs stored	%	DTCs stored	%	No DTCs stored	%	DTCs stored	%
2015	0	0.00%	29	100.00 %	0	0.00%	0	0.00%	22	75.86%	0	0.00%	0	0.00%	0	0.00%
2014	91	0.47%	19,357	99.53%	0	0.00%	0	0.00%	19	59.38%	0	0.00%	0	0.00%	0	0.00%
2013	384	0.39%	97,342	99.61%	1	0.00%	61	0.06%	72,674	74.37%	331	0.34%	0	0.00%	0	0.00%
2012	421	0.47%	88,987	99.53%	1	0.00%	143	0.16%	85,893	96.07%	708	0.79%	0	0.00%	0	0.00%
2011	2,652	3.10%	82,929	96.90%	1	0.00%	202	0.24%	82,056	95.88%	916	1.07%	2,038	2.38%	12	0.01%
2010	3,071	3.74%	79,137	96.26%	1	0.00%	315	0.38%	78,067	94.96%	1,106	1.35%	2,417	2.94%	13	0.02%
2009	2,879	4.47%	61,549	95.53%	6	0.01%	501	0.78%	60,120	93.31%	1,470	2.28%	2,068	3.21%	31	0.05%
2008	4,426	5.14%	81,634	94.86%	2	0.00%	981	1.14%	79,162	91.98%	2,537	2.95%	3,008	3.50%	30	0.03%
2007	5,632	6.55%	80,365	93.45%	6	0.01%	1,521	1.77%	76,719	89.21%	3,705	4.31%	3,615	4.20%	44	0.05%
2006	7,358	8.73%	76,879	91.27%	9	0.01%	2,074	2.46%	71,973	85.44%	4,959	5.89%	4,718	5.60%	84	0.10%
2005	9,379	10.47%	80,166	89.53%	8	0.01%	2,681	2.99%	74,581	83.29%	5,641	6.30%	6,081	6.79%	116	0.13%
2004	11,248	12.96%	75,512	87.04%	8	0.01%	3,399	3.92%	68,947	79.47%	6,629	7.64%	7,068	8.15%	190	0.22%
2003	12,456	15.52%	67,823	84.48%	23	0.03%	3,813	4.75%	61,604	76.74%	6,286	7.83%	7,827	9.75%	272	0.34%
2002	13,753	18.64%	60,028	81.36%	7	0.01%	4,321	5.86%	53,455	72.45%	6,589	8.93%	8,677	11.76%	264	0.36%
2001	14,775	22.98%	49,529	77.02%	6	0.01%	4,671	7.26%	44,098	68.58%	5,430	8.44%	9,440	14.68%	238	0.37%
2000	10,090	18.35%	44,893	81.65%	4	0.01%	4,094	7.45%	39,941	72.64%	4,965	9.03%	5,308	9.65%	188	0.34%
1999	8,158	19.21%	34,306	80.79%	3	0.01%	3,321	7.82%	30,345	71.46%	3,958	9.32%	4,266	10.05%	176	0.41%
1998	6,805	19.88%	27,424	80.12%	1	0.00%	2,958	8.64%	23,261	67.96%	3,402	9.94%	3,464	10.12%	140	0.41%
1997	5,078	19.65%	20,760	80.35%	0	0.00%	2,431	9.41%	18,042	69.83%	2,386	9.23%	2,359	9.13%	111	0.43%
1996	3,461	20.42%	13,492	79.58%	1	0.01%	1,798	10.61%	11,255	66.39%	1,509	8.90%	1,456	8.59%	72	0.42%
Grand Total	122,119	9.66%	1,142,145	90.34%	88	0.01%	39,300	3.11%	104,3944	82.57%	62,581	4.95%	73,811	5.84%	1,981	0.16%

(a)(3) The initial test volume by model year and test station;

Documentation provided electronically in Excel file.

(a)(4) The initial test failure rate by model year and test station.

Documentation provided electronically in Excel file.